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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Yu Gong

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EXAMINER

HARPER, LEON JONATHAN

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/783,779	Applicant(s) GONG, YU	
	Examiner LEON HARPER	Art Unit 2166	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 May 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 100-131 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 100-131 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. The amendment filed on 5/27/2009 has been entered. No claims have been amended or cancelled. Claims 116-131 has been added. Accordingly, claims 100-131 are pending in this office action.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 100-131 are rejected under 35 U.S.C. 103(a) as being unpatentable over US (20040034615 Thomson) in view of 6549922 (hereinafter Srivastava(

Art Unit: 2166

As for claim 100 Thomson discloses: wherein said source ETL application includes source ETL metadata, separate from said source database metadata, that describes database objects of said source database (See paragraph 0063); said source ETL application causing generation of a module comprising metadata that describes said one or more of database objects (See paragraph 0095); a target ETL application reading said module; wherein said target database system includes target database metadata that describes database objects of said target database; wherein said target ETL application includes target ETL metadata (See paragraph 0043-0050), separate from said target database metadata, that describes said database objects of said target database; wherein said reading said module causes said target ETL application to perform loading said database objects within said target database; wherein said loading includes: modifying said target ETL metadata to describe said one or more database objects; modifying said target database metadata to describe said one or more database objects; incorporate within said target database a tablespace holding data for at least one of said one or more database objects (See paragraphs 0036, 0050, 0054).

Thomson does not explicitly disclose a source ETL application receiving, from a user, input that selects one or more database objects to be transported from a source database to a target database ; wherein said source database system includes source database metadata that describes database objects of said source database. Srivastava does disclose a source ETL application receiving, from a user, input that selects one or more database objects to be

Art Unit: 2166

transported from a source database to a target database (See column 2 lines 30-40); wherein said source database system includes source database metadata that describes database objects of said source database (See column 4 lines 31-39). It would have been obvious to an artisan of ordinary skill in the pertinent art at the time the invention was made to have incorporated the teaching of Srivastava into the system of Thomson. The modification would have been obvious because the two references are concerned with the solution to problem of data processing, therefore there is an implicit motivation to combine these references. In other words, the ordinary skilled artisan, during his/her quest for a solution to the cited problem, would look to the cited references at the time the invention was made. Consequently, the ordinary skilled artisan would have been motivated to combine the cited references since Srivastava's teaching would enable user's of the Thomson system to have efficient optimized metadata storage (See Sri column 1 lines 25-35).

As for claim 101 the rejection of claim 100 is incorporated and further Thomson discloses: in response to a failure occurring during the loading of said database objects within said target database, rolling back all changes made during the loading of the database objects to the target database (See paragraph 0066).

Art Unit: 2166

As for claim 102 the rejection of claim 100 is incorporated and further Thomson discloses: wherein the selected one or more database objects to be transported from a source database to a target database includes a database object that has metadata stored outside of the source database (See paragraphs 0151-0153).

As for claim 103 the rejection of claim 100 is incorporated and further Thomson discloses: wherein generation of a module includes analyzing the source database metadata for dependencies (See paragraph 0009).

As for claim 104 the rejection of claim 100 is incorporated and further Thomson discloses: wherein analyzing the source database metadata for dependencies includes ensuring proper order of loading of the source database metadata into the target database (See paragraph 0046, 0107).

As for claim 105 the rejection of claim 100 is incorporated and further Thomson discloses: storing said module in one or more files in a source file system (See paragraph 0046).

As for claim 106 the rejection of claim 105 is incorporated and further Thomson discloses: said target ETL application performing the steps of: reading a specification containing information for how to move modules from said source file system to a target file system; and wherein said information comprises a

Art Unit: 2166

network protocol and the location in the source file system of said one or more files; and accessing said one or more files in a source file system based on said information (See paragraphs 0006).

As for claim 107 the rejection of claim 106 is incorporated and further Thomson discloses: wherein the network protocol is one of FTP, HTTP, HTTPS, or rsync (See paragraphs 0006, 0037, figure 2).

Claims 108-115 are method claims corresponding to the method of claims 100,103-107, 101-102 and are thus rejected for the same reasons as set forth in the rejection of claims 100,103-107, 101-102.

Claims 116-131 are computer-readable volatile or non-volatile storage device claims corresponding to claims 100-115 and are thus rejected for the same reasons as set forth in the rejection of claims 100-115.

Response to Arguments

Applicant's arguments filed 5/27/2009 have been fully considered but they are not persuasive.

Applicant argues:

The Office Action relies on paragraph [0036], [0050], and [0054] of Thomson to allegedly teach this feature. Paragraph [0036] describes the "Business Objects Universe" (BOU) that presents to the user a view of the database that is more business-oriented than the database structure itself. Although the cited passage describes abstracting databases that have tables, it does not describe storing a database map in a table. In fact, it states that the BOU is "part repository." A repository is not necessarily a database, and objects stored in a repository are not necessarily loaded into tables. Paragraph [0050] states that the Universe comprises a set of objects that are "about" databases. There is no teaching or suggestion that the Universe objects themselves are stored in a database. Paragraph [0054] describes the run time architecture of Thomson's system, stressing that normally server-side databases perform the majority of data processing. There is no mention or description of client-side database loading objects into tables, much less the UDS components performing the loading. Therefore, none of the cited passages describe or in any way mention an ETL application (UDS components) loading data for a database object (report) into a tablespace of a target database system (client database

Art Unit: 2166

system). Thus, Thomson does not teach the quoted feature, and Srivastava does not, nor is it alleged to, remedy the deficiencies in Thomson.

Examiner responds:

Examiner is not persuaded. Examiner is entitled to give claim limitations their broadest reasonable interpretation in light of the specification. Interpretation of Claims-Broadest Reasonable Interpretation: During patent examination, the pending claims must be 'given the broadest reasonable interpretation consistent with the specification.' Applicant always has the opportunity to amend the claims during prosecution and broad interpretation by the examiner reduces the possibility that the claim, once issued, will be interpreted more broadly than is justified. In re Prater, 162 USPQ 541,550-51 (CCPA 1969). In this Thomson does disclose storing a mapping in a database (See paragraph 0068 noting that the maps in are in fact managed). Thomson further discloses a translation from an originating database format to a target database format (See abstract)

Applicant argues:

Srivastava describes a system which extracts metadata that is stored embedded in a media file and stores the extracted metadata as annotations in a database separate from the media file. A media file is not a database, and media contained within the file is not a database object. Thus, Srivastava does not teach or suggest receiving user input that selects one or more database objects. Furthermore, the metadata embedded within the media of the media file is not

Art Unit: 2166

database metadata. Thus, neither Thomson nor Srivastava teach or suggest this feature, and thus no combination of them would teach the feature either.

Examiner responds:

Examiner is not persuaded. Initially examiner notes that one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). In this case Srivastava is cited for the general disclosure of the selection of objects to be transported (See column 2 lines 30-40) and metadata that is included that describes objects in the system (See column 4 lines 31-39).

Moreover the "Test of obviousness is not whether features of secondary reference may be bodily incorporated into primary reference's structure, nor whether claimed invention is expressly suggested in any one or all of references; rather, test is what combined teachings of references would have suggested to those of ordinary skill in art." *In re Keller, Terry, and Davies*, 208 USPQ 871 (CCPA 1981).

Applicant argues:

Even if the technique described in Srivastava was performed on objects in a source database, there is still no motivation to combine Thomson and Srivastava. The Office Action states that it would have been obvious to incorporate the teaching of Srivastava into the system of Thomson. However, the

Art Unit: 2166

Office Action does not specify which teaching of Srivastava would have been incorporated into Thomson. It appears as though the Office Action suggests that the source database metadata that describes database objects of said source database (which corresponds to the information about the Thomson's report) would be embedded into the one or more database objects (corresponding to Thomson's report) as allegedly taught by Srivastava. However, Thomson's report is a query definition and presentation layout that is separate from the metadata provided by a client that describes the location of the originating client, originating and target data sources, and associated rules (paragraph [0057]). Thus, Thomson's report can be created and used in any number of source/target combinations, and the report is customized for the source/target selection when combined with the client-specific metadata. Embedding metadata into the report would require a separate report to be stored for each combination of [originating data source, target data source, report]. Storing so many different report combinations teaches away from solving the cited problem of optimizing storage space. Thus, a person skilled in the art would not have been motivated to incorporate the teaching of Srivastava into Thomson. Regarding the assertion that a skilled artisan would look to Srivastava to solve the problem addressed by Thomson because both references are concerned with data processing, not all references concerned with data processing belong to the same field of endeavor. The Office Action provides no evidence that Srivastava is from the same field of endeavor as Thomson. To the contrary, a person skilled in the art of presenting database reports across heterogeneous database types would not think to

Art Unit: 2166

consult a reference for transforming media files. Manipulating media files is very different than coordinating presentation of items stored in different heterogeneous databases.

Examiner responds:

Examiner is not persuaded. As noted above Srivastava is cited for the general disclosure of the selection of objects to be transported (See column 2 lines 30-40) and metadata that is included that describes objects in the system (See column 4 lines 31-39). The rationale to support a conclusion that the claim would have been obvious is that "a person of ordinary skill in the art would have been motivated to combine the prior art to achieve the claimed invention and that there would have been a reasonable expectation of success." *DyStar Textilfarben GmbH & Co. Deutschland KG v. C.H. Patrick Co.*, 464 F.3d 1356, 1360, 80 USPQ2d 1641, 1645 (Fed. Cir. 2006). The Courts have made clear that the teaching, suggestion, or motivation test is flexible and an explicit suggestion to combine the prior art is not necessary. The motivation to combine may be implicit and may be found in the knowledge of one of ordinary skill in the art, or, in some cases, from the nature of the problem to be solved. *Id.* [A]n implicit motivation to combine exists not only when a suggestion may be gleaned from the prior art as a whole, but when the improvement' is technology- independent and the combination of references results in a product or process that is more desirable, for example because it is stronger, cheaper, cleaner, faster, lighter, smaller, more durable, or more efficient. Because the desire to enhance

Art Unit: 2166

commercial opportunities by improving a product or process is universal-and even commonsensical we have held that there exists in these situations a motivation to combine prior art references even absent any hint of suggestion in the references themselves. In such situations, the proper question is whether the ordinary artisan possesses knowledge and skills rendering him capable of combining the prior art references.” *Id.* at 1368, 80 USPQ2d at 1651.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **LEON HARPER** whose telephone number is (571)272-0759. The examiner can normally be reached on Flex.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hosain Alam can be reached on (571) 272-3978. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2166

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

LJH
Leon J. Harper
August 27, 2009

/Hosain T Alam/

Supervisory Patent Examiner, Art Unit 2166